

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

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In the Matter of)
Revision of the Commission's Rules) CC Docket No. 94-102
To Ensure Compatibility with) RM-8143
Enhanced 911 Emergency Calling Systems)

To: The Commission

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COMMENTS OF AMERITECH

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SUMMARY

Ameritech Corporation (Ameritech) respectfully submits these Comments in response to the Commission's Further Notice of Proposed Rulemaking¹ in this matter. Ameritech supports the Commission's efforts to facilitate the improved provision of 911 and E911 services by wireless carriers in order to enhance the provision of emergency services to the public. However, as stated in Ameritech's Petition for Partial Reconsideration, filed September 3, 1996, Ameritech opposes any requirements: (a) to transmit non-code identification 911 calls, whether or not the PSAP has requested it; and (b) to provide a specific level of accuracy for location information, because it is too soon to determine the accuracy levels that will be technically feasible. Ameritech also opposes any requirements for wireless carriers to complete calls that are not compatible with their systems, and to comply with maximum latency requirements as well as any requirements to update location information during a 911 call. Ameritech requests the Commission to let industry standards-setting bodies establish the technical standards for upgrades and improvements to 911 systems, and permit industry trade organizations and public safety organizations to determine how consumer education goals should be met.

¹ Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, CC Docket No. 94-102, RM-8143, FCC 96-264, Report and Order and Further Notice of Proposed Rulemaking, released July 26, 1996 [hereinafter Report and Order and FNPRM].

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¹ Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, CC Docket No. 94-102, RM-8143, FCC 96-264, Report and Order and Further Notice of Proposed Rulemaking, released July 26, 1996 [hereinafter Report and Order and FNPRM].

² The term "PSAP" refers to a Public Safety Answering Point.

with their systems, and to comply with any maximum³ latency requirements as well as any requirements to update location information during a 911 call. Ameritech requests the Commission to let industry standards-setting bodies establish the technical standards for upgrades and improvements to 911 systems, and permit industry trade organizations and public safety organizations to determine how consumer education goals should be met.

These issues are discussed below.

I. The Commission Should Not Require Covered Carriers to Transmit All 911 Calls

In the FNPRM, para. 149, the Commission asked whether, within a reasonable time after one year from the effective date of the rules, it should require covered carriers to transmit all 911 calls (including non-code identification calls) to PSAPs. Before addressing this proposal, the Commission should resolve the petitions for reconsideration that request the Commission to eliminate its requirement for covered carriers to transmit non-code identification 911 calls at the request of PSAPs. Such petitions for reconsideration were filed by Bell Atlantic NYNEX Mobile, Inc. (BANM),⁴ PrimeCo Personal Communications, L.P.

³ Although the FNPRM, para. 142, refers to "minimum" latency periods, Ameritech assumes the Commission meant to refer to "maximum" latency periods.

⁴ BANM Petition for Reconsideration, dated Sept. 3, 1996 (its 11-page petition focused on this one issue).

(PrimeCo),⁵ XYPOINT Corporation (XYPOINT),⁶ Nextel Communications, Inc. (Nextel)⁷ and Nokia Telecommunications, Inc. (Nokia).⁸ Ameritech also filed a Petition for Partial Reconsideration requesting the Commission to eliminate its requirement for covered carriers to transmit non-code identification 911 calls at the request of PSAPs.⁹ A decision on these petitions for reconsideration should be made before the Commission considers expanding its rule to require the transmission of non-code identification calls regardless of whether the PSAP has made such a request.¹⁰

If the Commission were to deny the petitions for reconsideration and retain its rule requiring the transmission of non-code identification 911 calls at the request of PSAPS, Ameritech would oppose the imposition of a requirement to transmit non-code identification 911 calls that have not been

⁵ PrimeCo Petition for Reconsideration, dated Sept. 3, 1996, at 2-4.

⁶ XYPOINT Petition for Reconsideration, dated Sept. 3, 1996, at 3-6.

⁷ Nextel Petition for Reconsideration, dated Sept. 3, 1996, at 3-6.

⁸ Nokia Petition for Reconsideration, dated Aug. 30, 1996, at 2-3.

⁹ Ameritech Petition at 7-10.

¹⁰ See also PCIA Comments on Alliance Petition at 3-4 (requesting that service providers be required to transmit 911 calls only in a home service area or a subscribed-to roamed service area); Vanguard Cellular Systems, Inc. Comments (CA) at 6 (opposing proposal to require wireless providers to accept calls from handsets that have not been activated).

requested by PSAPs, for the same reasons that it asked the Commission to eliminate the existing rule. First, PSAPs would have no way to call back non-code identification equipment users because such users have not subscribed to any service.¹¹ This adds to the potential for PSAPs and carriers to be unnecessarily dragged into litigation. If PSAPs have not requested to receive such calls, perhaps one of the reasons is a concern about potential litigation.

Second, by permitting non-code identification 911 calls, the Commission would facilitate prank calls and fraudulent calls.¹² If the wireless carrier were not able to trace the call, the public safety agency would be prevented from making rational decisions as to the likelihood of a call being genuine, and whether a response should be sent.¹³ This result could be detrimental to public safety, especially for 911 systems that are already overwhelmed with 911 calls.¹⁴ Theoretically, an

¹¹ See PCIA Comments at 4; XYPOINT Petition at 4; Nokia Petition at 2.

¹² See PCIA Comments at 5.

¹³ See *id.*; XYPOINT Petition at 5 (stating that "[t]here are numerous examples in the industry of emergency response officials being lured into dangerous situations by anonymous wireless phone callers intent on abusing the system to commit a crime").

¹⁴ See 911's Busy Signal, The Fresno Bee, Mar. 21, 1996, at B4 (stating that the 911 system is "so overwhelmed by cellular phone users that increasingly people with real emergencies can't get through" and that this situation is "not just frustrating but dangerous"); Lan Nguyen, As Mobile Phone Use Grows, "Cellular Samaritans" Clog 911, Washington Post, July 8, 1996, at B1 (noting that an increase in the number of 911 cellular calls affects the speed that all calls may be answered).

unscrupulous person could use the "redial" button on a cell phone to lock up the 911 system for long periods of time.

Additionally, the industry is becoming aware of situations where phones for which the caller has not subscribed to service have been used to make non-911 calls by having the PSAP operator patch the call through as a wireline call. By requiring covered carriers to process non-code identification 911 calls, the Commission would be facilitating such fraudulent use of wireless services which, by tying up a line to the PSAP, would be detrimental to public safety. If PSAPs have not requested to receive non-code identification calls, perhaps one of their reasons is their concern for public safety.

Third, carriers would have no way of limiting their liability for any errors that occur in their processing of a 911 call from a non-code identification equipment user. Because the user would not have a service contract with any carrier, a carrier's liability could not be limited by the terms of such a contract. If the Commission were to retain its rule requiring carriers to transmit non-code identification calls at the request of PSAPs, carriers could be exposed to the corresponding liability. If the Commission were then to expand the scope of non-code identification calls to include those which have not been requested by a PSAP, the carrier's potential liability could similarly be expanded. Thus, if the Commission were to require carriers to process all non-code identification calls, the

Commission should ensure that carriers will not be liable for processing such calls.

Finally, the carrier will not be able to recover the cost of processing non-code identification calls from the user. Because the non-code identification user is not a customer or a roamer, any charges the carrier may impose on its customers or roamers in order to support its provision of 911 service would not apply to the non-code identification user. PCIA stated that 68% of cellular telephones are purchased for safety and security reasons,¹⁵ and another recent survey found that 88% of people planning to buy cellular phones rate security as the most compelling reason.¹⁶ Many cellular users subscribe to the lowest rate plan and keep the phone in their car for emergency use only. If consumers were to learn that they do not need to subscribe to wireless service in order to obtain access to 911, consumers may purchase phones without subscribing to any wireless service. Wireless carriers would not receive fees from such users, and therefore would not receive support for the maintenance of the radio facilities that such consumers would use for emergency service. Thus, the costs of providing the emergency service would not be borne by the cost-causers, but instead would drive up the price of service for local subscribers and roamers.¹⁷

¹⁵ PCIA Comments at 5.

¹⁶ Survey Shows Greatest Cellular Usage Growth Still to Come, PR Newswire, Apr. 10, 1996, available in LEXIS, News Library, Allnws File.

¹⁷ See XYPOINT Petition at 5-6.

While this imbalance would be imposed if the Commission were to require carriers to transmit non-code identification 911 calls at the request of PSAPs, it would be exacerbated by any requirement to transmit all non-code identification 911 calls.

In sum, Ameritech suggests that the Commission should not require carriers to process non-code identification calls -- regardless of whether or not the PSAP has requested such processing. However, if, in response to the petitions for reconsideration, the Commission were to retain its requirement that carriers process non-code identification 911 calls at the request of PSAPs, Ameritech requests that the rule be left as is; that is, such calls will be processed by the carrier only upon the request of a PSAP.

II. The Commission Should Not Require Carriers to Complete Calls that Are Not Compatible with Their Systems

In the FNPRM, para. 147, the Commission requested comment on the steps that could be taken to enable 911 calls to be completed regardless of whether the mobile user seeking to place a 911 call has a radio compatible with the closest wireless service. Ameritech opposes this requirement for several reasons. First, just as the requirement to transmit non-code identification 911 calls would unnecessarily impose potential liability and actual costs on the wireless service provider, so too would the requirement to process calls from users with incompatible technology. Also, depending on how this proposal would be

implemented, the PSAPs may have no way of calling back the wireless user.

Second, if the Commission's proposal were accomplished with a system-based solution, all wireless carriers would have to support all wireless frequencies and protocols. A cellular carrier would need to scan cellular frequencies as well as Block A, B, C, D, E and F broadband PCS frequencies, which it obviously cannot do because it is licensed to operate on only one, defined frequency block (i.e., cellular A Block or B Block). In order to support all wireless frequencies, carriers would need additional licenses from the Commission and would need to make major upgrades to their wireless systems at enormous costs to the carriers. If these costs are passed on to end users, the end users may stop using wireless services. Third, a 911 call could potentially be transmitted by more than one wireless service provider (e.g., the A Block cellular, the Block B PCS, and the Block C PCS providers). This would result in duplicative calls being received by the PSAP. Many PSAPs already receive many calls on the same incident.¹⁸ This proposal would unnecessarily exacerbate the problem.

Alternatively, if a handset-based solution were used, and if handsets would have to transmit using every frequency and every possible protocol until a system responds to the 911 call, each handset would need to use at least three cellular air interfaces and several PCS interfaces, and transmit on many frequency

¹⁸ See supra note 14.

bands.¹⁹ Such increased capabilities would result in increased battery size, increase handset size, and increased cost.²⁰ This outcome would discourage public acceptance of wireless service, thereby increasing the chance that persons observing an emergency would have no radio with which to summon help.

No record has been developed showing that wireless systems in a given geographic area have such different coverage patterns that customers of one system will frequently be unable to reach help, because they are in an area covered only by a different carrier. In general, all wireless services build out to areas of significant population and to major travel routes. In many parts of the country, coverage is becoming ubiquitous. The ongoing PCS and SMR auctions result in the presence of at least seven or eight wireless carriers in all geographic areas. Among these carriers, it is likely that at least one will provide the necessary coverage, with compatible technology, to handle an end user's 911 call.

III. It Is Too Soon to Require 90% Accuracy Within a Radius of 40 Feet, Using Longitude, Latitude and Altitude Data

The Commission requested comment on whether covered carriers should provide PSAPs with information that locates a wireless 911 caller within a radius of 40 feet, using longitude, latitude, and

¹⁹ See PCIA Comments on Alliance Petition at 6.

²⁰ See id.

altitude data, for 90 percent of the 911 calls processed.²¹

While Ameritech supports the Commission's goal of providing the best 911 service possible, it is premature to establish the location requirements proposed by the Commission. Covered carriers first need to resolve the technical requirements and cost recovery mechanisms for Phase II. Then, the wireless industry will need to determine how to obtain the accuracy sought by the Commission. Only after these steps have been accomplished should the Commission consider imposing such requirements on covered carriers. And even then, Ameritech submits that the Commission should consider: (a) the associated costs and how they will be recovered; and (b) whether altitude information should be required in all areas, or perhaps, only in large cities that have tall buildings.

The Commission's decision on this issue also should await its decision on the petitions for reconsideration filed in this proceeding. For example, in their petitions for reconsideration, Nokia and the Telecommunications Industry Association (TIA) stated that it is too soon to mandate the accuracy requirement of 67% reliability within 125 meters within five years.²² PCIA similarly requests the Commission to reconsider its five-year

²¹ FNPRM, para. 138.

²² Nokia Petition at 3; Mobile and Personal Communications Division of the Telecommunications Industry Association Petition for Reconsideration, dated Sept. 3, 1996, at 16-19.

deadline.²³ Moreover, BellSouth Corporation (BellSouth) requested reconsideration of the five-year deadline based on the discouraging responses it received to its Request for Information which was sent to 150 equipment vendors.²⁴ If the Commission were to grant these petitions for reconsideration and eliminate the five-year accuracy requirement, the Commission also should postpone considering the more stringent requirement of 90% accuracy within 40 feet, as proposed in the FNPRM, paras. 138-39.

Nevertheless, if the proposed accuracy requirements were adopted, wireless carriers and public safety organizations should have the flexibility to provide location information using measurement methodologies other than latitude and longitude, as stated in Ameritech's Petition for Partial Reconsideration, at 6-7. For example, the requirement could provide for a specific degree of accuracy within a specific radius, but require the use of "longitude, latitude and altitude (or equivalent, available and feasible technological measurement standards)."²⁵

In sum, the accuracy requirements proposed by the Commission are premature. If the Commission, nevertheless, were to adopt

²³ PCIA Petition for Reconsideration, dated Sept. 3, 1996, at 13.

²⁴ BellSouth Petition for Reconsideration, dated Sept. 3, 1996, at 10-12.

²⁵ Ameritech Petition at 6-7; see TIA Petition at 19-20 (suggesting the phrase "longitude or latitude or equivalent").

such requirements, it should permit carriers to use alternative measurement technologies.

IV. The Commission Should Not Establish a Maximum Latency Period and Should Not Require Location Information to Be Updated During the 911 Call

It would likewise be premature to require wireless service providers to supply location information to the PSAP within a certain period of time (e.g., 5 seconds) after the 911 call is made, and to periodically update the location information during the 911 call (e.g., every 10 seconds).²⁶ Such requirements should not be adopted. The record in this proceeding does not provide any documentary evidence showing the need for such requirements. Indeed, the Commission has recognized that approximately 97% of wireless 911 calls are made by Good Samaritans.²⁷ There is no need to update location information for Good Samaritans because they are not guaranteed to be at the location of the emergency. For example, a driver on the Washington, D.C. beltway who calls 911 to report an accident will likely be one half mile away from the accident within 30 seconds. In such a situation, only the initial location of the Good Samaritan would provide information that may be useful to emergency service providers. Additionally, if 97% of the wireless 911 callers are Good Samaritans, only 3% of wireless 911 callers are calling for assistance they personally need. Many of

²⁶ FNPRM, para. 142,

²⁷ Report and Order, para. 129.

these callers may not be mobile. For example, the caller may be at home or at work in an office, and may not be able to move after the 911 call is made (due to a physical impairment, a disabled car, etc.). Thus, the number of wireless 911 callers who personally need assistance and who are mobile may represent only 1% of the wireless 911 callers. Any requirement to update the caller's location during the 911 call will unreasonably impose cost burdens on wireless carriers for the benefit of that 1% of 911 callers. There is also no evidence in the record that the proposed 5-second and 10-second requirements are technically feasible.

Furthermore, the Commission has not imposed any latency period requirement for wireline 911 service, and in fact, the FCC has established very few requirements concerning call setup for wireline carriers.²⁸ Thus, it would be unreasonable to establish latency requirements for wireless 911 calls when such requirements have not proven necessary for wireline 911 calls. Additionally, the lack of transmission requirements for wireline calls will exacerbate the wireless service providers' efforts to comply with any latency requirements. Because a wireless 911 call is ultimately processed by the wireless service provider, a local exchange carrier and a PSAP, the local exchange carrier and PSAP may impact the speed of transmission of the 911 call and the corresponding location information. In effect, a maximum latency

²⁸ See BANM Petition at 9 (asking whether "any" regulation which discriminates against wireless carriers is lawful under the Communications Act).

period requirement for wireless 911 service would impose the entire burden of compliance on the wireless provider, when in actuality, actions of the local exchange carrier and the PSAP would directly impact whether compliance is possible. Thus, the Commission's proposal would unfairly place the burden of compliance solely on the wireless carrier when there are factors beyond its control that will impact its ability to comply. Ameritech therefore requests that the Commission not establish a maximum latency period.

Even if the Commission were to establish a maximum latency period, the Commission must clearly define how the "number of seconds after the 911 call is made" will be determined. The question is: When is the call "made"? Is it when the caller presses the "send" key? Or, for handsets that do not require the caller to press a "send" key, is the call "made" when the caller presses the second "1" of 9-1-1, or when the handset goes "off-hook"? Or is the call "made" when the PSAP acknowledges the call? Or when the PSAP answers the call? What if the system is busy and the caller does not get through to the PSAP? In the event that the Commission were to require a maximum latency period, it must answer these questions so that carriers will be able to determine how to comply. However, as discussed above, a latency period does not appear to be feasible or necessary at this time.

V. Upgrades and Improvements Should Be Determined by Standards-Setting Bodies

In addition to proposing the aforementioned performance requirements, the Commission tentatively concluded that covered carriers should continue to upgrade and improve 911 service.²⁹ Ameritech submits that the Commission should mandate neither the technical standards, nor the time frame, for the implementation of upgrades and improvements. Instead, industry standards-setting bodies should continue to determine how 911 service may be deployed.³⁰ If desired, the Commission could require the standards-setting bodies -- not the covered carriers, as suggested by the Commission³¹ -- to submit annual reports on developments in 911 service. Such an approach would be similar to that used by the Commission to implement the National Plan for the use of public safety spectrum.³² There, regional public safety planning groups developed plans tailored to their areas and their own particular communications needs, while the Commission provided general oversight.³³

²⁹ FNPRM, para. 143; Report and Order, para. 14.

³⁰ See PCIA Reply Comments at 11 (requesting FCC to permit industry bodies to resolve technical issues).

³¹ FNPRM, para. 143.

³² Development and Implementation of a Public Safety National Plan, 3 FCC Rcd. 905, 905 (1987).

³³ See id.

VI. Consumer Education Should Be Developed by Industry Trade Groups and Public Safety Organizations

Finally, in the FNPRM, paras. 150-53, the Commission has requested comment on the scope of a consumer education program that would inform the public of the capabilities and limitations of 911 service, and the carrier obligations that could be established in connection with such a program. In particular, the FCC suggested that handset labelling or instructions from the handset manufacturers should be provided to inform customers about the capabilities and limitations of wireless 911 service.³⁴

Ameritech agrees that the Commission should establish national consumer education requirements concerning the use of wireless 911 services. These requirements should be guidelines -- not rules. Moreover, this goal is best accomplished by permitting industry trade groups, such as PCIA, and the relevant public safety organizations to formulate a suggested program to establish a uniform, nationwide consumer education plan. Such nationwide coordination is needed so that carriers and handset manufacturers are not faced with different education requirements in each state. The FCC could follow the example it established for determining the use of public safety spectrum, discussed above,³⁵ by permitting industry trade groups and public safety

³⁴ FNPRM, paras. 151-52.

³⁵ Development and Implementation of a Public Safety National Plan, 3 FCC Rcd. at 905.

organizations to work together to determine a nationwide plan.³⁶ These entities have the experience, resources and incentive to research the issues associated with consumer education, and formulate the most efficient and effective way to implement the requirements. The FCC could reserve the option of stepping in if the need arises, just as the FCC provided general oversight for the public safety spectrum planning.³⁷

CONCLUSION

For the foregoing reasons, Ameritech respectfully requests the Commission to:

- * Refrain from adopting any requirements to transmit non-code identification 911 calls, regardless of whether the PSAP has requested it.
- * Refrain from requiring wireless carriers to complete calls that are not compatible with their systems.
- * Refrain from imposing accuracy requirements for location information, because it is too soon to determine the accuracy levels that will be technically feasible. However,

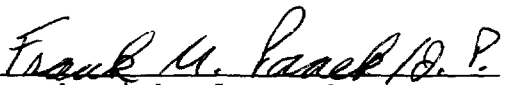
³⁶ See also News Release, Public Safety Wireless Advisory Committee Approves Final Report, released Sept. 20, 1996 (committee established by FCC and NTIA to advise on the operational, technical and spectrum requirements of federal, state and local public safety entities through the year 2000).

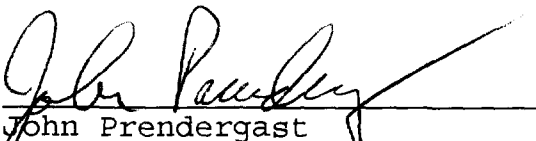
³⁷ See Development and Implementation of a Public Safety National Plan, 3 FCC Rcd. at 905.

if such requirements were adopted, Ameritech suggests that the terms "longitude and latitude" be replaced with terms that permit the use of other measurement standards.

- * Refrain from imposing maximum latency periods and requirements to update location information during a 911 call.
- * Let industry standards-setting bodies establish technical standards for upgrades and improvements to 911 systems.
- * Permit industry trade organizations and public safety organizations to determine how consumer education goals should be met.

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